

# PRECISION LOOP CALIBRATOR

## VERY HIGH ACCURACY

PCL120  
\$595



PCL120, \$595, shown smaller than actual size.



- ✓ ±0.015% Reading Accuracy
- ✓ 0.001 mA Very High Resolution
- ✓ % Error Function—Eliminates Manual Error Calculation
- ✓ Extended Adjustment Range—Digital Knob and User-Selectable Decade Output Allow Large and Incremental (0.001 mA Step) Output Changes
- ✓ Reads 0 to 28 Vdc
- ✓ Built-In 250 Ω Resistor Facilitates Calibration of Hart® Devices
- ✓ Remote Calibration Through Automatic Step and Ramp Functions
- ✓ Loop Power Measurement Capability
- ✓ Simulates, Powers, and Measures 2-Wire Transmitters
- ✓ 5-Preset Outputs (4, 8, 12, 16, 20 mA)
- ✓ Fuseless Input Protection Up to 250 Vac
- ✓ Protected by Full Rubber Boot

The PCL120 has many innovative, powerful features that make calibration easy. A few clearly marked keys give the user access to the full functionality of the unit. The STEP and RAMP output modes automate either a discrete 4-8-12-16-20-16-12-8-4 mA stair step output or 2 speeds of a linear 4-20-4 mA ramp output. Pressing the AUTO key (1) activates this time-saving function. To further aid remote calibration, the PCL120 features a minimum/maximum value recall function. In the measure mode, holding the AUTO/(MAX) key (1) gives a direct readout of the maximum value, while holding the 25%/(MIN) key (4) gives a direct readout of the minimum value. Holding the % ERROR key (2) while turning the large knob provides instant feedback on the difference between the ideal and actual current values required for a given device response. This tells the user whether the device is within its accuracy range. No further calculations are necessary. A LOOP POWER key (3) provides instant 24 Vdc loop power output. The 25% (4) key provides instant outputs of 4, 8, 12, 16, and 20 mA loop current, with increments occurring each time the key is pushed.

### SPECIFICATIONS (@ 25°C)

**Input**  
**Current Range:** 0 to 24 mA; -25 to 125%  
**Voltage (Reading):** 0 to 28 Vdc  
**Input Protection:**  
 Fuseless up to 250 Vac  
**Output**  
**Source/Simulate Range:**  
 0 to 24 mA; -25 to 125%  
**Drive Capability:**  
 Without Hart®: 1200 Ω  
 With Hart®: 950 Ω

**Loop Supply Voltage:** 24 Vdc  
**Range Select:** Decade; incremental in 0.001 mA steps  
**Resolution:** 1 μA  
**Accuracy:** ±0.015% of reading ±2 μA  
**Environmental**  
**Operating Temperature:** -10 to 55°C (14 to 131°F)  
**Storage Temperature:** -20 to 70°C (-4 to 158°F)  
**Power:** 9 Vdc; battery included  
**Mechanical**  
**Dimensions (Without Boot):**  
 144.7 H x 80 W x 3.63 mm D (5.7 x 3.15 x 1.43")  
**Weight:** 340 g (12 oz)



OMEGACARE<sup>SM</sup> extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARE<sup>SM</sup> covers parts, labor and equivalent loaners.

With an accuracy of 0.015% of reading and 0.001 mA resolution, the PCL120 has the highest precision in its class. Other features that make the PCL120 stand out include a "% error" function, which eliminates manual error calculation and allows the display of actual versus ideal error at any calibration point. The PCL120 can simulate, power, and measure 2-wire transmitters. Its' automatic step and ramp functions enable remote calibration of 4 to 20 mA devices.

**AVAILABLE FOR FAST DELIVERY!**

To Order (Specify Model Number)		
MODEL NO.	PRICE	DESCRIPTION
PCL120	\$595	Precision loop calibrator
PCL-ACA	45	120 Vac, power adaptor, PCL422A-BATT required
PCL422A-BATT	25	9V NiCad battery

Comes complete with test leads, 9V battery, NIST-traceable certificate and operator's manual.  
**Ordering Examples:** PCL120, precision loop calibrator, \$595.  
 OCW-1 OMEGACARE<sup>SM</sup> extends standard 1-year warranty to a total of 2 years (\$59), \$595 + 59 = \$654.



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